

Next Generation Firewall - Hands-on Basic («FIRE1»)

This course is aimed at people with no previous knowledge who would like to gain initial experience with a Next Generation Firewall. The knowledge gained can be put to use immediately and provides the skills to set up and operate a firewall.

Duration: 4 days

Price: 3'600.–

Content

1st course day

- Basics of modern networks
- Network technology
- Addressing in the network
- MAC and IP addresses in practice

2nd course day

- Data transport with TCP and UDP
- Communication and sessions
- Standards in data exchange
- Network applications

3rd course day

- What network hardware exists and what it is used for
- What is a firewall, what is it used for and how does it work
- What types of firewall exist
- Differences between virtual instances and appliances
- Basic installation of the open source firewall
- Basics of the firewall console
- Basics of the web interface
- Configuration of the WAN interface
- Configuration of the LAN interfaces
- Setup of a DHCP server
- DHCP leases and static reservation

4th course day

- NTP
- VLAN configuration
- Link Aggregation
- DNS resolution
- Dynamic DNS
- Alias handling
- Firewall best practices
- RFC1918
- Understanding firewall rules
- Creating and editing firewall rules
- System logging
- Traffic graph
- Monitoring
- Troubleshooting

Key Learnings

- First basics of modern networks and network technology
- Addressing in the network
- Everything about MAC and IP addresses in practice
- Data transport with TCP and UDP
- Communication and sessions
- Knowing the standards for data exchange
- Getting to know various network applications
- Repetition of OSI layer
- What network hardware exists and what it is used for
- What is a firewall, what types are there, what is it used for and how does it work
- Differences between virtual instances and appliances
- Basic installation of the open source firewall
- Basics of the firewall console and web interface
- Configuration of the WAN interface and LAN interfaces
- Setup of a DHCP server
- DHCP leases and static reservation
- Knowledge of NTP, VLAN configuration, link aggregation, DNS resolution and Dynamic DNS
- First handling of alias
- Firewall best practices
- Understand, create and edit firewall rules
- Everything about system logging, traffic graphing, monitoring and troubleshooting

Methodology & didactics

- Mediation by means of presentation
- Live demonstration
- Practical examples
- Multidimensional learning up to synthesis

Target audience

This course is aimed at employees of companies who want to build up or improve their network knowledge and the handling of a Next Generation Firewall (basic knowledge), as well as individuals who want to protect their home network.

Additional information


Next Steps

Deepen your knowledge in the advanced courses: [Next Generation Firewall - Hands-on Advanced \(FIRE2\)](#) and [Next Generation Firewall - Hands-on Expert \(FIRE3\)](#)

Price advantage

Take advantage of an exclusive discount of over CHF 500 when you book the course series: «[Next Generation Firewall - Security Professional](#)» (FIRE).

Netgate 4100 Security Appliance

To ensure that you achieve maximum learning success and can immediately put the knowledge you have gained into practice, we provide you with a personal firewall appliance which you may keep after completing the course. The Netgate 4100 with integrated pfSense Plus software is one of the most versatile security gateways in its class. With thousands of organizations using pfSense software, it is among the world's most trusted open source network security solution. 

For more product information, visit <https://shop.netgate.com/products/4100-base-pfsense>

Further courses

- [Next Generation Firewall - Hands-on Advanced \(«FIRE2»\)](#)

Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-security/cyber-security-defense/course-next-generation-firewall--hands-on-basic